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<sup>20</sup>56. (Newly-Presented) An image forming unit according to Claim <sup>19</sup>55,  
wherein a free end of said projection is bent.

<sup>21</sup>57. (Newly-Presented) An image forming unit according to Claim <sup>19</sup>58,  
wherein a free end of said projection is folded back.

<sup>22</sup>58. (Newly-Presented) An image forming unit according to Claim <sup>13</sup>49,  
further comprising as a unit at least one of developing means for developing a latent image  
on said image bearing member, charging means for electrically charging a surface of said  
image bearing member, and cleaning means for cleaning the surface of said image bearing  
member.--

#### REMARKS

It is respectfully submitted that the Amendment filed January 3, 2003 is  
fully responsive to all of the issues raised in the Official Action dated July 3, 2002. This  
Supplemental Amendment improves the form of the application and presents additional  
claims.

The specification has been amended to place such in better form. It is  
respectfully submitted that no new matter has been added.

Claims 1, 3 through 7, 11 through 13, 15, 16, and 48 through 58 remain  
pending in the application, with Claim 1 being independent. Claims 1, 3 through 7, 11  
through 13, 15, and 16 have been amended to even more succinctly define the invention  
and to improve their form. It is respectfully submitted that no new matter has been added.

Claims 48 through 58 have been presented herein to accord Applicants an additional scope of protection commensurate with the disclosure. Again, it is respectfully submitted that no new matter has been added.

It is respectfully submitted that the structure of Taniyama, et al. is fundamentally different from the surface fastener defined in the present claims. Taniyama, et al. discloses a conventional coupling mechanism, which requires phase alignment to correctly establish a driving engagement. According to the claimed invention, no phase alignment or any mechanism for the phase alignment is required.

Kobe merely discloses a surface fastener.

The Examiner's attention is directed to the Remarks section of the Amendment filed January 3, 2003 for a more detailed discussion of Taniyama, et al. and Kobe.

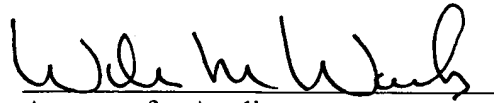
Applicants respectfully submit that none of the cited art discloses or suggests use of a surface fastener for the driving force receiving portion for receiving the driving force for feeding the toner in a toner container.

Additionally, none of the cited art discloses or suggests use of a surface fastener for a driving force receiving portion for receiving a driving force for driving an image bearing member in an image forming unit.

It is earnestly believed that the present application is in condition for allowance and early passage to issue of the application at the Examiner's earliest convenience is earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the below listed address.

Respectfully submitted,



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**VERSION WITH MARKINGS SHOWING CHANGES MADE TO  
SPECIFICATION**

The paragraph starting at page 1, line 24 and ending at page 2, line 2 has been amended, as follows.

--Since the toner comprises very fine particles, the toner supply container, when the toner is replenished, is placed inside the image forming apparatus so as to prevent the toner from scattering, and the toner is discharged little-by-little [little by a little] through a small opening, as is known.--

The paragraph starting at page 2, line 17 and ending at page 2, line 21 has been amended, as follows.

--The toner supply container is kept inside the main assembly of the apparatus in use, and the toner is fed by rotating the toner feeding member by the main assembly side of the apparatus, so that the former is discharged little-by-little [a little by little] through the opening.--

The paragraphs starting at page 4, line 3 and ending at page 5, line 1 have been amended, as follows.

--(1) In the first case, it is required to properly engage the gear portion provided on the outer surface of the bottle with a driving gear portion of the main assembly of the image forming apparatus when the toner bottle is inserted into the main assembly, and the

operation requires special attention of the user, and therefore, this system places demands [load] on the user. The rotation of the toner bottle by engagement between gears produces a force tending to cause lateral deviation of the toner bottle with the result of the toner bottle deviating to prevent correct rotation. It would be required in order to prevent such a deviation that the entire surface of the toner bottle is enclosed and supported. If this is done, the mounting and demounting of the toner bottle would not be easy[, and in]. In addition, the structure for the supply system would be complicated, leading to [the cost] an increase in cost.

(2) In the second and third case, the positioning in the direction of the rotation of the toner bottle is required when the projection (recesses) of the end surface of the toner bottle is brought into the engagement with the recess (projection) of the main assembly driving portion. This degrades the supplying operativity since it places a demand [load] on the user. Even a small deviation might prevent proper drive transmission.--

The paragraphs starting at page 7, line 27 and ending at page 8, line 3 have been amended, as follows.

--Figure 7 is a view as seen in the direction of arrow A shown [An] in Figure 6.

Figure 8 is a sectional [front] view of the device shown in Figure 6.--

The paragraph starting at page 12, line 3 and ending at page 12, line 5 has been amended, as follows.

--Figure 50(A) [50] is a view of the sealing member as shown in Figure 49 [6] as seen in the direction of arrow A [(A)], and Figure 50(B) is a view of the sealing member as shown in Figure 49 [seen] in the direction of arrow B [(B)].--

The paragraph starting at page 12, line 24 and ending at page 12, line 26 has been amended, as follows.

--Figure 59(A) [59] is a view of the sealing member as shown in Figure 58 [6] as seen in the direction of arrow A [(A)], and Figure 59(B) is a view of the sealing member as shown in Figure 58 [seen] in the direction arrow B [(B)].--

The paragraph starting at page 17, line 16 and ending at page 17, line 19 has been amended, as follows.

--The cleaning station 202 is provided for removing the toner particles remaining on the photoconductive drum 104. The primary charger 203 is provided for charging the photoconductive drum 104.--

The paragraph starting at page 18, line 26 and ending at page 19, line 20 has been amended, as follows.

--The toner supply container 1, [(]which hereinafter may sometimes [sometime] be referred to as the toner bottle[)], is virtually cylindrical, and has a toner outlet 1a, which is smaller in diameter than the main structure of the toner bottle 1, and projects from the approximate center of the outward surface of one of the end walls of the toner bottle 1. The toner outlet 1a is provided with a sealing member for sealing the toner outlet 1a. The sealing member 2 is slidable in the axial direction of the toner bottle 1 to open or close the toner outlet 1a. The end of the sealing member 2 is provided with the toner supply container side 3, that is, one of the two pieces of a surface [surface] (surface-to-surface) fastener, which engages with the main assembly side 30, that is, the other of the two pieces of the surface fastener 30, which is attached to the surface of the driving portion 20 (Figure 9) of the image forming apparatus main assembly, which will be described later, to transmit rotational force to the toner bottle 1. The configurations of the two sides 3 and 30 of the surface fastener [3 and 30] will be described later in detail.--

The paragraph starting at page 19, line 23 and ending at page 20, line 6 has been amended, as follows.

--The toner bottle 1 has a [an] virtually cylindrical shape, and is approximately horizontally disposed within the image forming apparatus main assembly. It is structured to rotate by receiving a rotational force from the apparatus main assembly 100. The toner bottle 1 has a spiral rib 1c, which is provided on the internal surface of the bottle 1. As the toner bottle 1 rotates, the toner therein is conveyed in the axial direction of

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the bottle 1 along the spiral rib 1c, and is discharged from the toner outlet 1a located at one end of the toner bottle 1.--

The paragraph starting at page 21, line 20 and ending at page 22, line 11 has been amended, as follows.

--The main structure 1A of the toner bottle 1 is provided with the toner outlet 1a and a drive shaft 1b. The toner outlet 1a is attached to one of the end walls of the toner bottle main structure 1A, and the drive shaft 1b is integral with the toner bottle main structure 1A and projects outward through the toner outlet 1a. The drive shaft 1b approximately coincides with the toner outlet 1a in terms of axial line, and fits in the hole 2a of the sealing member 2. The drive shaft 1b is provided for transmitting rotational driving force to the bottle main structure 1A from the apparatus main assembly 100 by way of the sealing member 2. Thus, the drive shaft 1b having [is given] such a cross section [that] enables the drive shaft 1b to transmit rotational driving force to the toner bottle main structure 1A; the cross section of the drive shaft 1b is in the form of a square, a letter H or D, or the like. Further, the drive shaft 1b is solidly fixed to the bottom main structure 1A.--

The paragraph starting at page 24, line 10 and ending at page 24, line 25 has been amended, as follows.

--Although the sealing member 2 is preferred to be formed of resinous material such as plastic by injection molding, it may be formed of a material other than



[the] resinous material and by a manufacturing method other than injection molding. Further, it may be formed in one piece, or may be molded in multiple pieces, which are joined together. Further, the sealing member 2 is required to have a proper amount of elasticity so that it can be pressed into the toner output 1a to hermetically seal the toner outlet 1a. For this purpose, the low density polyethylene is most desirable as the material for the sealing member 2. Also polypropylene or a straight chain polyamide, that is, nylon [Nylon] in commercial name, high density polyethylene, or the like, may be used with desirable results.--

The paragraph starting at page 28, line 22 and ending at page 29, line 11 has been amended, as follows.

--Although the toner supply container side 3 of the surface fastening means in this embodiment is attached to the end of the sealing member 2, this side 3 of the surface fastening means may be molded as an integral part of the sealing member 2 as shown in Figure 11. Further, this side 3 [(3)] of the surface fastening means may be solidly adhered to the surface of the sealing member 2, with the interposition of an adhering member 3b between the back side of the [this] side 3 [(3)] of the surface fastening means and the surface of the sealing member 2 as shown in Figure 12. Further, the toner supply container side 3 may be attached to the end of the sealing member 2 with the use of any of many methods other than the above mentioned ones, for example, a small screw [screws], a bolt, or the like.--

The paragraph starting at page 34, line 7 and ending at page 34, line 9 has been amended, as follows.

--The toner supply container 1 in this embodiment is replaced by a user [him/her self]. The replacement procedure is as follows.--

The paragraph starting at page 36, line 6 and ending at page 36, line 11 has been amended, as follows.

--Figure 29 is a drawing, which shows [for showing] one of the sequential steps through which the toner bottle 1 is inserted into the apparatus main assembly 100. In this step, the toner outlet 1a located at the leading end of the toner bottle 1 is sealed with the sealing member 2.--

The paragraph starting at page 48, line 25 and ending at page 49, line 16 has been amended, as follows.

--As for the cartridge mounting means, as a cover 14 is opened about an axis 14a, the cartridge mounting space is exposed, in which a pair of cartridge guiding members 32 are attached to the left and right walls, one for one, in parallel with [to] each other, as shown in Figure 40 (which shows only one of the lateral walls of the cartridge mounting space). The left and right cartridge guiding member 32 each are provided with a guiding portions 32a for guiding the process cartridge B when the process cartridge B is inserted into the apparatus main assembly. The guiding portions 32a are in parallel with

[to] each other. The cartridge B is inserted into the image forming apparatus A, with the bosses projecting perpendicularly from the lengthwise ends of the frame of the cartridge B guided by these guiding portions 32a. Then, as the cover 14 is closed, the process cartridge B is properly set in the image forming apparatus B.--

The paragraph starting at page 50, line 8 and ending at page 50, line 20 has been amended, as follows.

--On the other hand, the image forming apparatus main assembly is provided with the main assembly side 30 of the surface fastener. This fastener component 30 on the main assembly side is positioned relative to the drive shaft 1b so that as the process cartridge B is inserted into the apparatus main assembly 13, the axial line of the main assembly side 30 of the surface fastener aligns with that of the photoconductive drum 7. To this drive shaft 1b, a rotational force is transmitted from the pinion gear 33 of a motor 19 through a transmission gear 34. The main assembly side 30 of the surface fastener is attached to the end portion of this drive shaft 1b.--

The paragraph starting at page 53, line 19 and ending at page 53, line 21 has been amended, as follows.

--As is evident in the foregoing [above] descriptions of the first and second embodiments, the present invention provides the following effects:--

The paragraph starting at page 55, line 10 and ending at page 55, line 14 has been amended, as follows.

--(5) The foregoing [above] listed effects of the present invention regarding a toner supply container are also true of the driving force transmission between a process cartridge and the image forming apparatus main assembly.--

The paragraph starting at page 58, line 1 and ending at page 58, line 9 has been amended, as follows.

--The length by which the hole 2a and drive shaft 1b engage with each other in terms of their axial direction is sufficient to prevent the drive shaft 1b from becoming disengaged from the hole 2a when the sealing member 2 is separated from the toner bottle main structure 1A. Thus, even when the sealing member 2 is apart from the toner bottle main structure 1A, the drive shaft 1b can receive a driving force through the sealing member 2.--

The paragraph starting at page 58, line 15 and ending at page 59, line 3 has been amended, as follows.

--Although the sealing member 2 is preferred to be formed of resinous material such as plastic by injection molding, it may be formed of a material other than the resinous material and by a manufacturing method other than injection molding. Further, it may be formed in one piece, or may be molded in multiple pieces, which are joined

together. Further, the sealing member 2 is required to have a proper amount of elasticity so that it can be pressed into the toner outlet 1a to hermetically seal the toner outlet 1a. For this purpose, the low density polyethylene is most desirable as the material for the sealing member 2. Also, polypropylene or straight chain polyamide, that is, nylon [Nylon] (commercial name), high density polyethylene, or the like, may be used with desirable results.--

The paragraph starting at page 63, line 22 and ending at page 64, line 8 has been amended, as follows.

--As for the material for the surface fastener described above, resinous material such as plastic is desirable, and as for the production method therefor, injection molding is desirable. However, a material and production method other than the above may be employed. The toner supply container side 3 and main assembly side 30 [side30] of the surface fastener are required to have a proper amount of elasticity, when they are engaged or disengaged. Therefore, it is preferable that resinous material, for example, polyolefin resin, straight chain polyamide resin such as nylon [Nylon] (commercial name), polypropylene resin, or the like is employed as the material for the two sides [components] 3 and 30 of the surface fastener.--

The paragraph starting at page 68, line 10 and ending at page 68, line 22 has been amended, as follows

--However, when the driving force transmitting portion 20 on the image forming apparatus main assembly side 30 is approximately the same in configuration and size as the driving force receiving portion on the toner supply container side, and is in the noncylindrical [non-cylindrical] form, for example, a user must align a toner supply container in terms of its circumferential direction when mounting the toner supply container. Thus, it is preferable from the standpoint of operability that the driving force transmitting portion 20 and driving force receiving portion be nearly cylindrical.--

The paragraph starting at page 77, line 26 and ending at page 78, line 10 has been amended, as follows

--Further, when the driving force transmitting portion 20 on the image forming apparatus main assembly side is approximately the same in configuration and size as the driving force receiving portion on the toner supply container side, and is in the noncylindrical [non-cylindrical] form, for example, in the form of a triangle or polygonal pillar, a user must align a toner supply container in terms of rotational phase when mounting the toner supply container. Thus, it is preferable from the standpoint of operability that the driving force transmitting portion 20 and driving force receiving portion be virtually cylindrical.--

The paragraphs starting at page 82, line 14 and ending at page 83, line 7 have been amended, as follows

--Figure 63 shows a case in which the toner supply container side 3 of the surface fastener has been constructed as a plurality of pieces 3 [in a plural piece 3s], and attached to one of the end surfaces 1A1 of the toner bottle main structure 1A, being evenly distributed in the circumferential direction, and the first barrier 2e has been constructed and positioned to entirely surround the edge of the end surface 1A1 of the toner bottle main structure 1A.

As is evident from the above described cases, the location on the toner bottle 1q, to which the toner supply container side 3 of the surface fastener is attached, may be freely selected, depending on toner container configuration. However, when the toner supply container side 3 is divided into the [a] plurality of pieces as shown in Figure 63, the main assembly side 30, or the counterpart of the toner supply container side 3, of the surface fastener must be constructed so that it covers virtually the entirety of the end surface of the driving portion 20 on the main assembly side as shown in Figure 62.--

The paragraphs starting at page 84, line 2 and ending at page 84, line 9 have been amended, as follows.

--As is evident from the foregoing [above] descriptions, the third to fifth embodiments demonstrate the following effects:

(1) Should fragments, fuzz [fuzzes], and the like result from the surface fastener, they can be efficiently captured; such a problem as formation of an image of

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Attorney Docket No.: 00684.003244

inferior quality can be prevented by the employment of an inexpensive structural  
arrangement;--



**VERSION WITH MARKINGS SHOWING CHANGES MADE TO ABSTRACT**

The Abstract of the Disclosure section starting at page 104, line 2 and ending at page 104, line 12 has been amended, as follows.

--A driving force receiving member for receiving a driving force from an image forming apparatus includes a driving force receiving portion for receiving the driving force from a driving force applying portion of the image forming apparatus[, wherein said]. The driving force receiving portion is movable relative to the driving force applying portion to permit engagement and disengagement relative to the driving force applying portion[; wherein said]. The driving force receiving portion is provided with a surface fastener for engaging a surface fastener provided on the driving force applying portion.--

**VERSION WITH MARKINGS SHOWING CHANGES MADE TO CLAIMS**

1. **(Twice Amended)** A developer container detachably mountable to an image forming apparatus, said developer container comprising:

a main body for accommodating a developer, said main body being provided with an opening for permitting discharge of the developer; and

a driving force receiving portion for receiving a [the] driving force for feeding the developer in said main body toward said [the] opening, the driving force being supplied from a driving force supplying portion provided in the image forming apparatus,

wherein said driving force receiving portion is engageable with the driving force supplying portion by relative movement toward each other, and

wherein a surface fastener is provided on said driving force receiving portion [includes a surface fastener] for disengageable engagement with a surface fastener provided on [included in] the driving force supplying portion.

3. **(Twice Amended)** A developer container according to Claim 1, wherein each of said surface fastener of said driving force receiving portion and the surface fastener of the driving force supplying portion includes a plurality of elastically deformable projections formed thereon,

wherein said plurality of projections of said surface fastener of said driving force receiving portion are engageable with the plurality of projections of the surface fastener of the driving force supplying portion.

4. **(Twice Amended)** A developer container according to Claim 3, wherein each projection of said plurality of projections of said surface fastener of said driving force receiving portion and the plurality of projections of the surface fastener of the driving force supplying portion is thicker at a free end [portion] than at a base end [portion] thereof.

5. **(Twice Amended)** A developer container according to Claim 3, wherein one of said plurality of projections of said surface fastener of said driving force receiving portion and the plurality of the projections of the surface fastener of the driving force supplying portion are in the form of loops and the other of said plurality of projections of said surface fastener of said driving force receiving portion and the plurality of projections of the surface fastener of the driving force applying portion are configured in the form of hooks.

6. **(Twice Amended)** A developer container Claim 3, wherein each projection of said plurality of projections of said surface feature of the driving force receiving portion and the plurality of projections [provided] of the surface fastener of the driving force supplying portion is configured in the form of a frustum of a pyramid.

7. **(Twice Amended)** A developer container according to Claim 3, wherein a free end [portion] of each projection of said plurality of projections of said surface fastener of said driving force receiving portion and the plurality of projections of the surface fastener of the driving force supplying portion is rounded.

11. **(Twice Amended)** A developer container according to Claim 1, wherein said driving force receiving member includes a projection formed on said surface fastener of said driving force receiving member, which projects toward the driving force supplying member, so as to surround a projection formed on the surface fastener of driving force supplying portion

12. **(Twice Amended)** A developer container according to Claim 11, wherein a free end of said projection of said surface fastener of said driving force receiving member includes [projected portion is provided with] a bent portion.

13. **(Twice Amended)** A developer container according to Claim 11, wherein a free end of the projection of the surface fastener of the driving force supplying member is folded back [said projected portion is provided with a folded-back portion].

15. **(Twice Amended)** A developer container according to Claim 1, further comprising:

a sealing member for unsealably sealing said [the] opening,  
a feeding member for feeding the developer in said main body toward said  
[the] opening,  
wherein said feeding member is integrally rotatable with said sealing  
member by the driving force received by said driving force receiving portion.

16. **(Twice Amended)** A developer container according to Claim 1,  
wherein said driving force receiving portion is provided at one end [portion] of said main  
body adjacent to said [the] opening and said main body is rotatable by the driving force  
received by said driving force receiving portion.